school A to Z

Addition (+) and subtraction (-)
mental strategies (doing maths in your head)

We teach children a range of different ways to add and subtract numbers. We want them to look for patterns and use them as much as they can. We want them to have good **number sense** – an understanding of how and why different ways to add and subtract work well.

The goal is for them to be able to do it in their head in a way that makes sense to them.

To develop number sense, students learn:

Counting on and counting back	14 + 3 … **start** at 14, then count on to 17 ie 15, 16, 17. 12 – 3 … **start** at 12 then count back to 9, ie 11, 10, 9.
To bridge to 10	Find the nearest 10 eg 17 + 5; 17 and 3 is 20 and add 2 more
To pull numbers apart	5 = 2 + 3 **so** 8 + 5 = (8 + 2) + 3 = 13 24 = 20 + 4 **so** 66 + 24 = (66 + 4) + 20 = 90
Addition facts to 10	0 + 10, 1 + 9, 2 + 8, 3 + 7, 4 + 6, 5 + 5
Doubles	1 + 1, 2 + 2, 3 + 3, 4 + 4
Doubles + 1	1 + 2, 2 + 3, 3 + 4, 4 + 5

Splitting numbers into 10s and ones	62 = 6 tens and 2 ones
Counting up in 10s	eg 5, 15, 25, 35, 45 or 2, 12, 22, 32 etc for 58 + 30 start at 58, then think 68, 78, 88
Counting down in 10s	eg 97, 87, 77, 67, 57 for 85 − 40 start at 85, then think 75, 65, 55, 45
Easy combinations that add up to 10	$5 + 4 + 9 + 1 + 6 = 5 + (4 + 6) + (9 + 1)$
Easy combinations that add up to 50, 75 and 100	$45 + 80 + 55 + 20 = (80 + 20) + (45 + 55) = 200$
You can add in any order but not subtract in any order	$36 + 45 = 45 + 36$ **but** $76 − 32 \neq 32 − 76$